#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-001030 Address: 333 Burma Road **Date Inspected:** 28-Nov-2007

City: Oakland, CA 94607

**OSM Arrival Time:** 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** ZPMC CWI - Li Zhijiang **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** 

Yes No N/A **Delayed / Cancelled:** 34-0006 **Bridge No: Component:** Flux Core Arc Welding (FCAW) Butt Weld o

### **Summary of Items Observed:**

On this date the Caltrans Quality Assurance (QA) representative, John P. Tracy, arrived into Bay #7 and performed observations of ZPMC welder performing Flux Core Arc Weld (FCAW) welding operations. Following is the welded steel components and the details of the review.

Upon arrival, ZPMC Certified Welding Inspector (CWI) - Li Zhijiang of ZPMC was present and obtaining thermal welding parameters on ZPMC welder Lui Kaige (# 044830), under WPS-B-T-223-1-B-U2-F-1, for weld number FB001-04-026 - hot pass.

Liz Hijiang found all the welding parameters to be in accordance with the criteria set forth within the contractual documents. Having observed the operations it appears that the welding parameters are in compliance with the applicable Welding Procedure Specification (WPS).

The weld was concluded and a ZPMC personnel set forth to clean the weld and heat affect zone with a mechanical grinder. Once completed, ceramic heating coils were replaced to achieve proper welding preheat temperatures.

Thermal cutting for bevel preparations were ongoing to plates X18-X18A for weld joint number FB018-02-080.

Sub Arc Welding (SAW) operations were witnessed on plates X47-X47A-4 for weld# FB-008-06-026. ZPMC Quality COntrol (QC) personnel were present and took amp/voltage parameters during welding operations. Observed parameters appeared to be in accordance with the criteria set forth in the contractual documents.

### **Summary of Conversations:**

At the completion of the welding, CWI - Li Zhijiang, of ZPMC reported that the parameters taken were found to be acceptable, in accordance to the criteria set forth in contractual documents.

# WELDING INSPECTION REPORT

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## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Tracy,John	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer